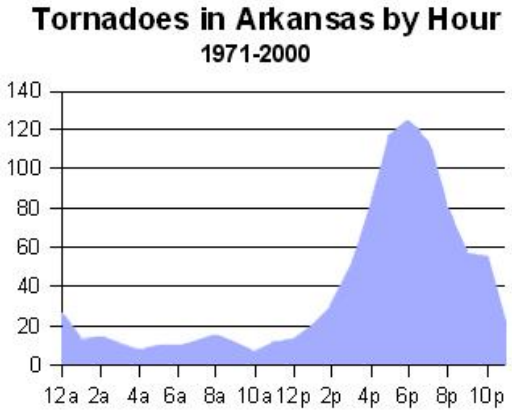
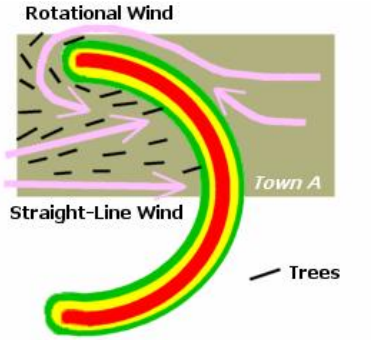
are not safe places to hide, even when a weak tornado is approaching. From 2000 to 2004, 5 of 6 tornado deaths occurred in mobile homes.



So when do tornadoes occur? Statistically, tornadoes are most likely during the afternoon and evening hours (between 3 pm and 8 pm). It is usually during this time frame that peak warming has occurred...and the atmosphere has become its most unstable.

When damage has occurred, tornadoes are often automatically blamed but not necessarily the culprit. In many cases, damage will be the result of straight-line wind.



In the picture: A model of a bow echo (i.e. boomerang shaped line of storms)...with a small tornado (with a narrow path) spawned on the northern end of the bow, and a large swath of straight-line wind produced farther south.

Many people don't realize that straight-line wind can be as damaging as a weak tornado (with speeds over 100 mph)! However, the swath of damage with straight-line wind is often wider than a tornado (on a scale of miles versus yards), and debris is often scattered in a consistent direction.

In the picture: A strong tornado (F2) downed trees in various directions about 4 miles southwest of Searcy (White County) on 11/24/2001.

Air mass thunderstorm - Generally, a thunderstorm not associated with a front or similar type of weather feature. Air mass thunderstorms typically are associated with warm, tropical air in the summer months; they develop during the afternoon in response to heating, and dissipate rather quickly after sunset. They generally are less likely to be severe than other types of thunderstorms.
Anvil - The flat, spreading top of a thunderstorm.
Approaching severe - A thunderstorm which contains winds of 40 to 57 mph or hail around 1/2 inch in diameter.
Bow echo - On radar, a line of thunderstorms that bulges outward into a bow shape. Damaging thunderstorm winds often occur near the center of a bow echo.
Box - A severe thunderstorm watch or tornado watch. The term derives from the fact that a watch takes the shape of a rectangle or parallelogram when plotted on a map.
Cap - A layer of warm air, several thousand feet above the surface, which suppresses or delays the development of thunderstorms. If the air is unstable enough, explosive thunderstorm development can occur if the cap is removed or weakened (for example, when colder air moves in).
Cold air funnel - A funnel cloud or (rarely) a small, relatively weak tornado that can develop from a shower or thunderstorm when the air aloft is unusually cold (hence the reference to "cold air").
Convection - In meteorology, this term is used most often to describe the vertical transport of heat and moisture, especially by updrafts and downdrafts in unstable air. Showers and thunderstorms are forms of convection.
Cumulonimbus cloud - A cloud characterized by strong vertical development in the form of mountains or huge towers, topped at least partially by a smooth, flat anvil. This type of cloud is more commonly known as a thunderstorm or thunderhead.
Cumulus - Detached clouds, generally dense and with sharp outlines, showing vertical development in the form of domes, mounds, or towers. Tops normally are rounded while bases are more horizontal. Cumulus clouds may grow into towering cumulus or cumulonimbus clouds.